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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,434	01/06/2004	Yeshwanth Narendar	S1432-700819	3742
37462	7590	01/20/2006	EXAMINER	
LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142			GROUP, KARL E	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 01/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/752,434

Applicant(s)

NARENDAR ET AL

Examiner

Karl E. Group

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 23-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 25-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 14, 23, 24 and 30-37 is/are rejected.
- 7) ☐ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s)        are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on        is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No.       .
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-28-05
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-28-05 has been entered.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 14,15,23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to provide support for recrystallized silicon nitride and aluminum oxide or provide sufficient description as to how to form these materials.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14,15,23,24,30-32 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims set forth "an active impurity component" however the claims fail to define what the impurity is active with and what impurities it is limited to. Therefor the metes and bounds of the claims cannot be determined. Furthermore it is not clear if the total impurity amount is limited to 1 ppm or each single impurity is limited to 1 ppm.

***Claim Rejections - 35 USC § 102 and 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 14,15,23,24,30-34, and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese documents 10-2287974 and 07-328360.

Claims 14,15,23,24,30-34 and 37 fail to compositionally define the "active impurity" and therefor fail to limit the impurity level to any specific impurity and therefor not distinguishing from the compositions of the Japanese documents. The Japanese documents teach porous recrystallized silicon carbide bodies with 10-2287974 having a pore size of 15-40 microns and 07-328360 a pore size of 20 microns. Applicants argument that the Japanese documents fail to teach a network of pores is not persuasive in overcoming the rejection. Firstly a "network" of pores is not equivalent to connected pores. Secondly Japanese document 07-328360 teaches a honeycomb-like pore structure which would be connected, see claim 2; and 10-228974, in the abstract teaches the porosity must be above greater than 30% to remain communicated. Machine translations of the documents are included.

7. Claims 33,34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Holmes et al (5,770,324).

Column 2, lines 9-15 teach recrystallized silicon carbide of an open pores size of 6-10 microns. The claims are considered anticipated.

8. Claims 14,15,23,24,30-34,35-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dubots et al (6,162,543).

Dubots et al teach a recrystallized silicon carbide porous body, where the porous body is recrystallized before siliconization, column 5, lines 30-34. The silicon carbide material has a total impurity level of less than 10ppm, with Fe less than .1 ppm, column 5, lines 6-21. Photomicrograph Figure 1, shows porosity greater than 5 microns.

It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

9. The rejection over GB 2130195 is withdrawn in view of the amendments limiting the claims to recrystallized silicon carbide, impurity levels less than 1 ppm and/or the claimed pore size. The GB patent does not disclose a pore size although the intermediate is disclosed as porous.

10. Claims 1-13,25-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Karl E Group  
Primary Examiner  
Art Unit 1755

Keg  
1-18-06